UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:

Vantage Oleochemicals Inc.
4650 South Racine Avenue
Chicago, IL 60609

ATTENTION:

Tony Massa
SSHE Manager
tony.massa@vantagegrp.com

Request to Provide Information Pursuant to the Clean Air Act

The U.S. Environmental Protection Agency is requiring Vantage Oleochemicals Inc. (Vantage or you) to submit certain information about the facility at 4650 South Racine Avenue, Chicago, Illinois ("the Facility"). Appendix A provides the instructions needed to answer this information request, including instructions for electronic submissions. Appendix B and C specifies the information that you must submit. You must send this information to us according to the schedule in Appendix B. Appendix C specifies the minimum content of your test protocol.

We are issuing this information request under Section 114(a) of the Clean Air Act (the CAA), 42 U.S.C. § 7414(a). Section 114(a) authorizes the Administrator of EPA to require the submission of information. The Administrator has delegated this authority to the Director of the Enforcement and Compliance Assurance Division, Region 5.

Vantage owns and operates an emission source and emission control equipment at the Facility. We are requesting this information to determine whether your emission source is complying with the Illinois State Implementation Plan, and the Clean Air Act.

At this time, EPA Region 5 is not accepting any hard-copy document deliveries. If possible, we ask you to upload all required information to the secured web-link shared with you at the time you received this request. If you did not receive a web-link, or if you are having technical difficulties, you must contact Karyn DeFranco at defranco.karyn@epa.gov or 312-886-0725 and Brianna Fenzl at fenzl.brianna@epa.gov or 312-886-1960 to make arrangements to submit your response.

Vantage must submit all required information under an authorized signature with the following certification:

> I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Clean Air Act and 18 U.S.C. §§ 1001 and 1519.

You may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B for any part of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice.

This information request is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq*., because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

We may use any information submitted in response to this request in an administrative, civil or criminal action.

Failure to comply fully with this information request may subject Vantage to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

MICHAEL HARRIS

Digitally signed by MICHAEL HARRIS
Date: 2022.08.05 09:14:17 -05'00'

Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division

Appendix A

When providing the information requested in Appendix B, use the following instructions and definitions.

Instructions

1. Provide a separate narrative response to each question and subpart of a question set forth in Appendix B.

2. Precede each answer with the number of the question to which it corresponds and, at the end of each answer, identify the person(s) who provided information used or considered in responding to that question, as well as each person consulted in the preparation of that response.

3. Indicate on each document produced, or in some other reasonable manner, the number of the question to which it corresponds.

4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.

5. Where information or documents necessary for a response are neither in your possession nor available to you, indicate in your response why the information or documents are not available or in your possession, and identify any source that either possesses or is likely to possess the documents or information.

6. If information not known or not available to you as of the date of submission later becomes known or available to you, you must supplement your response. Moreover, should you find at any time after the submission of your response that any portion of the submitted information is false or incorrect, you must notify EPA as soon as possible.

Electronic Submissions

To aid in our electronic recordkeeping efforts, we request that you provide all documents responsive to this information request in an electronic format according to paragraphs 1 through 6, below. These submissions are in lieu of hard copy.

1. Provide all responsive documents in Portable Document Format (PDF) or similar format, unless otherwise requested in specific questions. If the PDFs are scanned images, perform at least Optical Character Recognition (OCR) for "image over text" to allow the document to be searchable. Submitters providing secured PDFs should also provide unsecured versions for EPA use in repurposing text.

2. When specific questions request data in electronic spreadsheet form, provide the data and corresponding information in editable Excel format, and not in image format. If Excel or Lotus formats are not available, then the format should allow for data to be used in calculations by a standard spreadsheet program such as Excel or Lotus.

3. Provide submission to the secure web-link provided by EPA.

4. Provide a table of contents of all electronic documents submitted in response to our request so that each document can be accurately identified in relation to your response to a specific question. We recommend the use of electronic file folders organized by question number.

5. Please submit documents claimed as confidential business information (CBI) in separate file folders apart from the non-confidential information. This will facilitate appropriate records management and appropriate handling and protection of the CBI.

6. Certify that the attached files have been scanned for viruses and indicate what program was used.

Definitions

All terms used in this information request have their ordinary meaning unless such terms are defined in the CAA, 42 U.S.C. §§ 7401 *et seq*., or Illinois State implementation plan.

1. The term "wastewater process equipment" means any system in the wastewater treatment process located at the Facility that transports wastewater, including any and all sewer inlets, trenches, pipes,
2. The term "process water" means any water that is from operational processes at the Facility before it enters the main catchment basin. This includes, but is not limited to, all steam condensate, cooling tower blowdown, water from vacuum pumps, and scrubber water blowdown.
3. The term "wastewater treatment process unit" means any unit at the Facility that is used to treat wastewater. This includes, but is not limited to, the main catchment basin, Tank 163, hydroskimmer, biological oxygen demand (BOD) pond, and dissolved air flotation (DAF) unit.
4. The term "each emission point" means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in Volatile Organic Compounds (VOC) service and any devices or systems in VOC service.
5. The term "in VOC service" means any equipment that contains or contacts a process fluid that is at least 10 percent VOC by weight.
6. The term "TRE index" means a measurement of the supplemental total resource requirement per unit reduction of total organic carbon associated with an individual distillation vent stream, based on vent stream flow rate, emission rate of total organic carbon net heating value, and corrosion properties (whether or not the vent stream is halogenated), as quantified by the equation given under 40 C.F.R. § 60.664(e).

Appendix B

Information You Are Required to Submit to EPA

Vantage must submit the following information pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a).

1. Within 7 days of receipt of this request, Vantage must provide process flow diagram(s) describing all pieces of equipment and bypasses for the entire Facility. The diagram should include the flow of material through each process, from raw material to finished product, and should have all air pollution emission points identified by name.

2. Within 14 days of receipt of this request, Vantage must provide copies of all emissions test reports. Emission testing includes, but is not limited to, compliance testing, capture efficiency testing, destruction efficiency testing, initial performance tests required in NSPS NNN, engineering testing, and testing for general information. This shall include, but is not limited to, the emissions test performed on the Luwa Glycerin Distillation Plant (GD2).

3. Within 30 days of receipt of this request, Vantage must provide the results of any and all analyses and/or sampling done on process water or wastewater at any time that relates any Hazardous Air Pollutant (HAP) and/or any Volatile Organic Compound (VOC).

4. Within 30 days of receipt of this request Vantage must provide any and all documents concerning analysis of raw material, intermediate product, and final product at the Facility for the period of April 1, 2022 through the receipt of this request.

5. Within 30 days of receipt of this request, Vantage must provide the following information and supporting documentation:
    a. From 2008 to the receipt of this request, has Vantage sterilized its process equipment with anything other than steam? If so, provide:
        i. The SDS sheets for all chemicals used in the sterilization process;
        ii. The usage of all chemicals used in the sterilization process (gal/yr); and
        iii. The frequency at which Vantage has and/or does sterilize its process equipment.
    b. From 2008 to receipt of this request, list all coolants that Vantage uses at the Facility. Include usage (gal/year) and SDS sheets for all coolants used.
    c. From 2008 to receipt of this request, has Vantage used ethylene glycol at the Facility? If so, provide:
        i. A narrative description of why ethylene glycol is being used. Include all equipment in which ethylene glycol is used or is in contact with; and
        ii. Usage of ethylene glycol (gal/year);
    d. From 2013 to present, list all companies that Vantage received crude glycerin from for use at the GD2 plant. Provide all information Vantage has on catalysts used in the production of the crude glycerin;

e. Provide a narrative explanation of the cooling tower bleach tanks process. Provide supporting documentation, including:
    i. The SDS sheets for all chemicals used in the Cooling Tower cleaning/bleaching process including, but not limited to, the material stored in the "Cooling Tower Bleach Tanks", as described in the 05/07/2022 Attachment 3 submission to EPA;
    ii. The usage of all chemicals used in the sterilization process (gal/yr); and
    iii. The frequency at which Vantage cleans/bleaches the cooling tower.

6. Within 30 days of receipt of this request, Vantage must submit the following information to EPA. The records must be provided for the period July 1, 2017 through the present, unless otherwise designated. Vantage does not need to provide copies of documents that were previously submitted to EPA in response to EPA's March 8, 2022 Information Request:
    a. Provide, in excel format, the HAP and VOC potential to emit calculations from all emission units at the Facility;
    b. Fatty Acids Plant:
        i. Provide a flow diagram of the coconut oil refinement process;
        ii. Provide all SDS and MSDS for the coconut oil refinement process. This shall include all MSDS for the crude coconut oil (Tank #17), any lab analysis results Vantage does within this process, including but not limited to the split coconut oil fatty acid tanks (Tank #161 and #162) and the SDS sheets and usages for any and all additives;
        iii. Provide a diagram of all process wastewater streams from the coconut oil refinement process and their estimated flow (gal/hr);
    c. Kosher Glycerin Plant (GD2):
        i. Provide records and supporting documentation of the maximum total design capacity for all chemicals produced within the GD2 plant;
        ii. Provide records and supporting documentation of the vent stream flow rate from each process vent stream (scm/min and scf/min);
        iii. Provide internal calculations, in excel format, for each process vent stream TRE index calculations;
        iv. For each piece of equipment at the GD2 plant:
            (1) Provide EPA with the calculations and determinations of all vapor pressures using standard reference texts or ASTM D2879-83, 96, or 97;
            (2) Provide all calculations of the percent by weight of pure organic components processed for each piece of equipment; and
            (3) Provide an explanation of the material being processed in each piece of equipment is a liquid at operating conditions. This shall include all raw, intermediate, or final product material as applicable.
        v. Provide an explanation and supporting documents for all vent streams that are or have ever been determined to have a total concentration of compounds containing halogens of 20 ppmv (by compound) or greater;

vi. Provide records of the volatile organic liquid (VOL) storage, period of storage, and maximum true vapor pressure of the VOL during the storage period for tank #323;

d. Wastewater:
   i. Provide flow diagram(s) for each process unit contributing wastewater to the main catchment basin. This shall include the origin of the water to the process water streams; why Vantage treats each process water stream; estimated flow rate of each process water stream (gal/hr); whether stream of flow is constant per day; any and all analyses of the process water streams; and temperatures of the process water streams.
   ii. Process flow diagram(s) describing all inlets and outlets of wastewater to and from each wastewater treatment process unit. This shall include but is not limited to: all process equipment contributing to the wastewater streams; all pipes, sewers, trenches, drains etc.; the estimated flow rates (gal/hr); and whether stream of flow is constant per day. If there are any historic wastewater treatment process units that are not used by Vantage, please include the capacity, function, and flow of any and all pipes/sewers/drains to and from the emission unit.
   iii. Provide a sewer map of the entire Facility;
   iv. For the historic BOD wastewater pond, specify if Vantage uses this BOD pond and/or the water in any of its operations at the Facility; where this feeds into Vantage's current wastewater treatment process; and where this water discharges. Include any and all documents in the possession of Vantage concerning the wastewater pond including any information concerning the levels of any pollutant or contaminant in the water or the sediment.
   v. For each wastewater treatment process equipment, provide: the temperature of the water at each location; the water supply for each stream; and if emissions are vented to atmosphere or a control device;
   vi. Provide records and supporting documentation of the amount and type of any additives Vantage adds to any part of its onsite wastewater treatment process. Include SDS sheets and usages (lbs/year);
   vii. Identify and describe all capital improvements, expenditures, and/or construction to the onsite wastewater treatment process and/or equipment greater than $50,000 from July 1, 2008 through the receipt of this request; and
   viii. Provide a list and narrative description of the wastewater process equipment and units at the site prior to Vantage purchasing the Facility and what equipment Vantage installed for its own process. Include year of purchase and install by Vantage for each piece of new wastewater process equipment.

7. Within 60 days of receipt of this request Vantage must submit the following information regarding each raw material, intermediate, and final product tank or processing vessel at the Facility to EPA:

a. Provide internal calculation in excel format for the vapor pressure calculations of each raw material, intermediate, and final product tank;
b. I.D. and description of each tank or processing vessel;
c. Type of each tank or each processing vessel (cone fixed roof, dome fixe roof, internal or external roof);
d. An explanation as to which scrubber the tank is controlled by, if applicable;
e. Dimensions of each tank or processing vessel in feet;
f. Dome roof radius and height of each tank or processing vessel, in feet;
g. Slope of roof of each tank or processing vessel, in inches per feet;
h. Slope of cone down bottom of tank, in inches per feet;
i. Capacity of each tank or processing vessel at the Facility in gallons;
j. Shell paint color;
k. Roof paint color;
l. Nominal operating pressure;
m. Identify if each tank is insulated;
n. Vapor capture efficiency (if captured);
o. Inside shell construction (welded or riveted) and condition (light or dense rust, or gunite lined);
p. Annual throughput of each tank or processing vessel;
q. An explanation as to whether the tank or processing vessel shell is insulated;
r. An explanation as to whether the tank or processing vessel roof is insulated;
s. Maximum pump rate [of material in/out?];
t. Maximum liquid level;
u. Minimum liquid level;
v. Number of pressure vents, vacuum vents, and combination pressure/vacuum vents;
w. Number of vents open to atmosphere (per tank);
x. Minimum vent relieving pressure (vacuum);
y. Maximum vent relieving pressure (pressure);
z. Diameter and height of each tank sump;
aa. Identify the different types of materials that are stored and/or processed in each tank or processing vessel (fuel, oil, asphalt, etc.);
bb. Identify the different types of additives that are added to each tank or processing vessel by Vantage during storage or processing;
cc. Provide the vendor waste manifests, Vantage test results and MSDS of the different types of materials processed and/or stored and the different types of additives added into each tank or processing vessel at the Facility, from April 1, 2022 through the completion of all testing requirements;
dd. Specify the typical maximum and minimum liquid level and maximum and minimum volume (in gallons) of material in each tank or processing vessel;
ee. Provide pictures of the tanks or processing vessels from all sides and top;
ff. Describe the heating mechanism of each tank or processing vessel;
gg. Provide records of the temperatures and pressures measured at each tank or processing vessel for the period April 1, 2022 to the present and specify the location within the tank or processing vessel where the temperature and pressure were measured;

hh. If temperature and pressure data from any tanks is not available explain why and then specify the ranges of temperature and pressure of each tank or processing vessel and the basis for specifying those ranges;
ii. For each tank or processing vessel, if the tank material is circulated or agitated, explain by what means;
jj. Date tank or processing vessel was installed;
kk. Specify all tank or processing vessel additions, replacements or permanent shutdowns for the period July 1, 2017 to the present; and
ll. For each tank or processing vessel, specify the number of tank turnovers in a month and in a year and provide the dates of the most recent tank turnover. Provide supporting documentation such as operating records.

Appendix C

Information You Are Required to Submit to EPA

Emissions Testing

Vantage Oleochemicals Inc. (Vantage) must conduct testing and submit the following information pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a). Vantage must submit a test protocol, conduct testing, and submit all other information in accordance with the schedule specified below.

Submit Testing Protocol(s)	Within 30 days of receipt of this request
Notification of Intent to Test	No later than 21 days prior to testing
Complete Testing	Within 30 days of receipt of approval of the Test Protocol
Submit Testing Report	Within 30 days of completion of testing

1. Upon EPA approval of the Test Protocol(s), Vantage must perform emissions testing at the Facility to determine:
    a. At the GD2 plant, conduct VOC monitoring at each emission point using a portable instrument to detect VOC concentrations. During the testing conducted pursuant to this Item Vantage shall monitor and record VOC concentrations from each emission point at the GD2 plant using EPA approved Method 21.
    b. At the inlet and outlet of each scrubber for the Facility, quantify the mass emission rate of VOCs as total VOCs and individual HAP. Prior to the mass emission testing, Vantage must perform a pre-survey at the inlet and outlet of each scrubber to identify the VOCs and individual HAP present in the gas stream. The mass emission rates shall be determined by performing testing using combinations of the following EPA Reference Methods (or other methods subject to EPA approval): Methods 1-4, Method 18, Method 25/25A, and Method 320.
    c. At the following wastewater locations for the Facility, determine the volatile organic compounds and HAP concentrations in each stream. Vantage must sample: each individual process water; each inlet to the main catchment basin; main catchment basin; Tank 163; hydroskimmer; DAF unit; and the BOD pond to determine the volatile organic compounds in each wastewater stream. The volatile organic compounds shall be determined by performing testing using EPA Method 8260, or other methods subject to EPA approval.
    d. Test all raw material, intermediate products, and final product tanks in which more than 1000 gal/year is used and/or generated for HAP. Vantage shall identify

all HAP, including but not limited to, ethylene oxide, benzene, xylene, toluene, styrene, chloroform, chloromethane, and propylene.

2. During the testing conducted pursuant to Item 1(a), 1(b), and 1(c) Vantage shall operate all equipment being tested at representative (normal) conditions that represent the range of combined process and control measure conditions under which the Facility expects to operate; and are likely to most challenge the emissions control measures of the Facility with regard to meeting the applicable emission standards, but without creating an unsafe condition. All other process equipment shall be operating under conditions representative of normal conditions.

3. Within 30 days of completing the testing conducted pursuant to Item 1(a), Vantage shall submit a complete report of the Method 21 monitoring. The test report shall include, but is not limited to the following:
    a. Tanks, including raw material, intermediate and final product tanks, including:
        i. Date and time of monitoring.
        ii. Initials of Vantage and/or third-party contractor that is ;
        iii. Record of the liquid level, temperature, and pressure of each tank, and number of gallons in the tank at the time of testing. Including all applicable calculations and supporting documentation;
        iv. Number of pressure vents, vacuum vents, and combination pressure/vacuum vents;
        v. Number of vents open to atmosphere (per tank);
        vi. Minimum vent relieving pressure (vacuum);
        vii. Maximum vent relieving pressure (pressure);
        viii. Copies of all vendor manifests, Vantage test results and MSDS for all materials present in each tank or processing vessel at the time of testing;
        ix. The individual weight of raw material and intermediate product processed, and the weight of final product produced each day of testing (lbs/hr and lbs/day);
        x. The VOC content of raw material and intermediate product processed with supporting documentation and calculations (% VOC by wt.); and
        xi. The amount and description of any and all additives added by Vantage. Include all SDS sheets and/or supporting documentation.
    b. Facility Operations including, but not limited to:
        i. Description of the operation process;
        ii. Operating parameters of the related equipment at the time of the test for each day of sampling; and
        iii. Facility operating parameters that demonstrate that the Facility was being operated at representative (normal) conditions.
    c. Sampling and Analytical Procedures
        iv. Sampling point description, including labeling system;
        v. Brief description of sampling;
        vi. Sampling procedures, including equipment and any diagrams;
        vii. Brief description of analytical procedures, including calibration;

viii. Description of analytical procedures (planned or accidental) that deviated from any standard method; and
ix. Quality control/quality assurance procedures, tests, and results.

d. Appendix
x. Complete results for each sampling at each location;
xi. Raw field data;
xii. Calibration procedures and results;
xiii. Raw process and control equipment data, signed by plant representative;
xiv. Project participants and titles; and
xv. Related correspondence.

4. Vantage must submit a list and description of any maintenance or repairs made on process equipment at the GD2 plant and/or wastewater treatment units and the scrubbers from the date of receipt of this request until the dates of testing.

5. Prior to conducting the performance testing requested in Item 1(b), the Facility shall perform a pre-survey at the inlet and outlet of each scrubber to identify the VOCs and individual organic HAP present in the gas stream. The pre-survey must identify all VOC and HAP, including but not limited to, ethylene oxide, benzene, xylene, toluene, styrene, chloroform, chloromethane, and propylene. The results of the pre-survey shall be included in the test protocol and shall be used to determine the appropriate test methods used to determine the total VOCs emissions and individual organic HAP emissions.

6. During the testing conducted pursuant to Item 1(b), Vantage shall monitor, record, and include in the final test report the operating parameters for all equipment with emissions routing to the scrubber(s) and the operating parameters for the scrubbers including, but not limited to:
a. Results of the presurvey testing.
b. Tanks and Process Equipment:
i. Description of each tank and associated control equipment;
ii. The specific operating conditions of each tank or processing vessel at the time of the testing and sampling. Include, at a minimum:
1. I.D. and a description of whether the tank or processing vessel was routed to the scrubber at the time of the testing and sampling;
2. Liquid level of the tank and volume of material in each tank;
3. Material contents (including additives) of each tank at the time of the testing and sampling (provide MSDS, Vantage testing results and incoming waste manifests) and specify the date each material was added to the tank or vessel;
4. Explanation of whether the tank was agitated during the testing and sampling period;
5. Specify the liquid level, temperature and pressure at the time of testing and sampling;
6. Identify the location within the tank where the temperature was measured;

7. Specify the operating parameters that were measured at each tank during sampling and testing (e.g., temperature, pressure); and
8. Specify the scrubber parameters that were measured during testing and sampling and that were required to be recorded by paragraph 3, above.
9. List and describe any maintenance that was done on the tanks from the date of receipt of this request until the date of sampling and testing.

c. Scrubbers:
   i. Description of the process and control equipment in operation;
   ii. Operating parameters of each scrubber and its related equipment at the time of the test, including but not limited to, pH of the scrubbing liquor, gas temperature, pump pressure, makeup water flow rate, amount of phosphoric acid added (if applicable), temperature of each heated tank routed to the scrubber, and pressure of each tank routed to the scrubber;
   iii. Records showing that the scrubber pump and fan were operating during the testing and sampling;
   iv. A list and description of all maintenance done on all scrubbers, tanks and processes from the date of receipt of this request until the dates of testing; and
   v. Description of all raw materials in each tank during the test; including the amount and description of any and all additives added by Vantage. Include copies of all vendor wastes manifests, Vantage test results and MSDS for all materials present in each tank or processing vessel at the time of testing.

7. Within 30 days of receipt of this request, Vantage shall submit to EPA the proposed test protocols for the testing required in Items 1(a) and 1(b) that completely described the methods and procedures for testing at each unit and including all planned relevant operating parameters of each unit during the test. Vantage shall conduct the required testing under a protocol approved in advance by EPA. The protocol shall address the requirements of Items 1-5 of this information request. With the protocol(s), provide production data from the preceding 12 months to demonstrate that a representative production rate will be achieved during the testing. Submit the protocol by email to Karyn DeFranco at defranco.karyn@epa.gov and Brianna Fenzl at fenzl.brianna@epa.gov.

8. At least 21 days prior to the planned test date(s), Vantage shall submit notification to EPA of its intent to perform emission testing. Submit this notice by e-mail to the addresses above. Such testing shall be completed within 30 days of approval of the specified Test Protocol.

9. Within 30 days after completion of testing required pursuant to Item 1(b) and Item (2) above by this information request, submit a complete report of the emissions testing, including at a minimum, the following:

a. Summary of Results
    i. Results of the above specified emission tests:
        1. For the inlet and outlet of each scrubber, VOC mass emission rate results in pounds of total VOCs per hour and pounds total VOCs per ton of processed material for each material type (i.e., tallow, glycerin, kosher-glycerin, intermediate product, or a combination); and
        2. For the inlet and outlet of each scrubber, individual organic HAP results in pounds of total and individual HAP per hour and pounds of total and individual HAP in pounds per ton of processed material type (i.e., tallow, glycerin, kosher-glycerin, intermediate product, or a combination).
    ii. Discussion of response factors, molecular weight corrections, or any other factors used to convert raw data into the reported results (including a definition of any terms such as "response factor" that can be used to describe multiple types of corrections);
    iii. Process and control equipment data related to determining compliance;
    iv. Discussion of test errors; and
    v. Discussion of any deviations from the reference test methods.
b. Facility Operations
    i. Description of the process equipment in operation;
    ii. Operating parameters of the process units and related equipment at the time of the test;
    iii. Facility operating parameters that demonstrate that the process units were operated at maximum production rates at the time of the test; and
    iv. Discussion of any deviations from operating procedures and/or production rates.
c. Sampling and Analytics Procedures
    i. Sampling port location(s) and dimensions of cross-section;
    ii. Sampling point description, including labeling system;
    iii. Brief description of sampling procedures, including equipment and diagram;
    iv. Description of sampling procedures (planned and accidental) that deviated from any standard method;
    v. Brief description of analytical procedures, including calibration;
    vi. Description of analytical procedures (planned or accidental) that deviated from any standard method; and
    vii. Quality control/ quality assurance procedures, tests, and results.
d. Appendix
    i. Complete results with example calculations;
    ii. Raw field data (original, not computer printouts);
    iii. Laboratory report, with signed chain-of-custody forms;
    iv. Calibration procedures and results;
    v. Raw process and control equipment data, signed by plant representative;
    vi. Test log;
    vii. Project participants and titles; and

viii. Copies of correspondence relating to the testing.

10. During the testing conducted pursuant to Item 1(c) above, Vantage shall monitor, record, and include in the final test report the following operational and wastewater parameters:
    a. The origin of the water contributing to all process water streams;
    b. The process water streams contributing to each wastewater treatment unit;
    c. Temperature of each process water stream and the temperature at the inlet and outlet of each wastewater treatment unit;
    d. Waterflow of each process water stream and waterflow at the inlet and outlet of each wastewater treatment unit; and
    e. All chemicals added during the wastewater treatment process, including all SDS sheets and the usage of each chemical.

11. Within 30 days of receipt of this request, Vantage shall submit to EPA the proposed test protocol(s) that completely described the methods and procedures for testing at each unit and including all relevant operating parameters for the testing required in Item 1(c). Vantage shall conduct the required testing under a protocol approved in advance by EPA. The protocol shall address the requirements of Item 10in this request. With the protocol(s), provide production data from the preceding 12 months to demonstrate that a representative production rate will be achieved during the testing. Submit the protocol by email to Karyn DeFranco at defranco.karyn@epa.gov and Brianna Fenzl at fenzl.brianna@epa.gov.

12. At least 21 days prior to the planned test date for the testing required in Items 1(c) and 10above, Vantage shall submit notification to EPA of its intent to perform emission testing. Submit this notice by e-mail to the addresses above. Such testing shall be completed within 30 days of approval of the specified Test Protocol.

13. Within 30 days after completion of testing required pursuant to Item 1(c) above by this information request, submit a complete report of the emissions testing, including at a minimum, the following:
    a. Summary of Results.
        i. Individual volatile organic compound analyte concentrations of each requested stream (ug/L);
        ii. Waterflow of each water stream location tested (gal/hr);
        iii. Temperature of each water stream location tested (°F);
    b. Facility Operations.
        i. Description of the process equipment in operation;
        ii. Operating parameters of the process units and related equipment at the time of the test;
        iii. Facility operating parameters that demonstrate that the process units were operated at maximum production rates at the time of the test; and
        iv. Discussion of any deviations from operating procedures.
    c. Sampling and Analytics Procedures.
        i. Sampling location(s) and dimensions of cross-section;
        ii. Sampling point description, including labeling system;

iii. Brief description of sampling procedures, including equipment and diagram;
iv. Description of sampling procedures (planned and accidental) that deviated from any standard method;
v. Brief description of analytical procedures, including calibration;
vi. Description of analytical procedures (planned or accidental) that deviated from any standard method; and
vii. Quality control/ quality assurance procedures, tests, and results.

d. Appendix.
i. Complete results with example calculations;
ii. Raw field data (original, not computer printouts);
iii. Laboratory report, with signed chain-of-custody forms;
iv. Calibration procedures and results;
v. Raw process and control equipment data, signed by plant representative;
vi. Test log;
vii. Project participants and titles; and
viii. Copies of correspondence relating to the testing.

14. Within 30 days of receipt of this request, Vantage shall test all raw materials, intermediate material, and final product tanks in which more than 1000 gal/year is used and/or generated for HAP pursuant to Item 1(d). Vantage shall identify all HAP, including but not limited to, ethylene oxide, benzene, xylene, toluene, styrene, chloroform, chloromethane, and propylene. Within 15 days after completion of testing required pursuant to Item 1(d), submit a complete report of the emissions testing, including at a minimum, the following:
    a. Summary of Results.
        i. Individual VOC and HAP analyte concentrations of each tested material;
    b. Facility Operations.
        i. Description of the tank and/or process equipment in operation;
        ii. Quantity of material in each tank;
        iii. Origin of material in each tank;
        iv. Temperature of material in each tank;
        v. Facility operating parameters that demonstrate that the process units were operated at maximum production rates at the time of the test; and
        vi. Discussion of any deviations from operating procedures.
    c. Sampling and Analytics Procedures.
        i. Sampling location(s) and dimensions of cross-section;
        ii. Sampling point description, including labeling system;
        iii. Brief description of sampling procedures, including equipment and diagram;
        iv. Description of sampling procedures (planned and accidental) that deviated from any standard method;
        v. Brief description of analytical procedures, including calibration;
        vi. Description of analytical procedures (planned or accidental) that deviated from any standard method; and
        vii. Quality control/ quality assurance procedures, tests, and results.

d. Appendix.
    i. Complete results with example calculations;
    ii. Raw field data (original, not computer printouts);
    iii. Laboratory report, with signed chain-of-custody forms;
    iv. Calibration procedures and results;
    v. Test log;
    vi. Project participants and titles; and
    vii. Copies of correspondence relating to the testing.